

Sapna Deo Wins Prestigious Award

Bioanalytical chemistry professor is one of 39 chemical researchers in country to receive National Science Foundation's most prestigious junior faculty award.

Date: September 04, 2008

Duration: 1:38

Transcript

[Sapna Deo] The award given to the faculty, Early Career Development Award, given by the National Science Foundation is given to promising young scientists to promote their careers in research and education in basic sciences. It's given for developing methods for detection of RNA. RNAs are nothing but ribonucleic acids. So far RNAs are considered only as a messenger between DNA and protein. But recent studies with RNA have indicated that they play a significant role in gene expression control. So RNAs are considered biomarkers of diseases like cancer. If you have certain types of cancer, you look for the levels of these RNA that will relate to the disease. We develop methods to detect for those molecules.

It can be used by doctors or nurses; it can be used by scientists doing basic research in the medical field. It can be used by pharmaceutical industry; it can be used by industries like water resources and environmental types of industries.

So eventually we envision that the research conducted in my lab will lead to methods that you take any sample that you wanted to detect RNA and add our probes and in an instant it will be able to tell you what RNA is present and how much is present. So that's the ultimate aim.